WEATHER OF THE MONTH.

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

NORTH ATLANTIC OCEAN.

By F. A. Young.

The average pressure for the month was not far from the normal at land stations on the American coast and in the Azores and Bermudas, while it was considerably higher than usual over the northern part of the British Isles.

The number of days with gales was somewhat greater than usual over the steamer lanes, and there were from one to two days when winds of gale force prevailed in the Gulf of Mexico, which is exceptional for that locality.

Very little fog was reported by vessels in the steamer lanes and on the Grand Banks, although it was unusually prevalent off the coasts of England and Scotland.

On the 1st a Low was central near the English Channel and a number of vessels between the Irish coast and the twentieth meridian reported moderate northerly and northwesterly gales, while southeasterly gales were also encountered off the north coast of Scotland.

From the 2d to the 11th the conditions were nearly normal, although a few reports were received denoting heavy weather over the steamer lanes, and fog prevailed in the vicinity of the British Isles during the entire period. Storm logs are as follows, British S. S. Venusia:

Gale began on the 3d. Lowest barometer 29.50 inches on the 4th; position, latitude 52° 46′ N., longitude 39° 00′ W. End of gale on the 4th. Highest force of wind 11; shifts of wind S.-SW.

Belgian S. S. Tongrier:

Gale began on the 4th. Lowest barometer 29.55 inches at 11 a.m. on the 4th; position, latitude 43° 40′ N., longitude 14° 44′ W. End of gale on the 5th. Highest force of wind, 10; shifts of wind none.

British S. S. Rhode Island:

Gale began on the 10th. Lowest barometer 29.29 inches at midnight on the 11th; position latitude 51° N., longitude 41° W. End of gale on the 13th. Highest force of wind, 11; shifts of wind W. by N.-NW.-W.

On the 12th there was a disturbance over the region between Scotland and Iceland, and winds of gale force were encountered in the southerly quadrants as shown by the storm log from the British S. S. Galtymore:

Gale began on the 11th. Lowest barometer 28.55 inches at 10 p. m. on the 14th; position, latitude 55° 13′ N., longitude 14° 12′ W. End of gale on the 19th. Highest force of wind, 12; shifts of wind SW.-8. and back to SW.

On the 12th there was a second Low central near Swan Island in the West Indies, and while moderate winds were reported near the center, vessels in the vicinity of the Mexican and Texas coasts experienced strong northerly gales, with comparatively high barometric readings. Storm log from the American S. S. Hadnot:

Gale began on the 11th. Lowest barometer 30 inches at 11.30 p. m. on the 11th; position, latitude 21° 30′ N., longitude 96° W. End of gale on the 13th. Highest force of wind, 10; shifts of wind not given.

On the 13th, as shown on Chart IX, the position of these two Lows had changed but little since the previous day, with moderate to strong gales off the coast of northern Europe and in the western part of the Gulf of Mexico, while in the latter region the barometer readings were even higher than on the 12th. On the 13th there was a third disturbance central near St. John's, N. F., and westerly to northerly gales swept the American coast from Nova Scotia to Florida.

On the 14th (see Chart X) moderate weather prevailed along the American coast and Gulf of Mexico, but an unusually severe disturbance covered the steamer lanes east of the 50th meridian. Storm logs are as follows:

British S. S. Rhode Island:

Gale began on the 13th. Lowest barometer 28.98 inches at midnight on the 13th; position, latitude 49° 18′ N., longitude, 45° 50′ W. End of gale on the 15th. Highest force of wind 11; shifts SW.-NW.-W. by N.

British S. S. Caronia:

Gale began on the 12th. Lowest barometer 29.09 inches at 10 a.m. on the 14th; position, latitude 50° N., longitude 27° 18′ W. End of gale on the 15th. Highest force of wind 10; shifts of wind WSW.-W. by S.-WNW.

By the 15th the storm area had contracted considerably, although strong westerly gales were reported between the west coast of Scotland and the 15th meridian, while the barometer readings were considerably lower than on the previous day as shown by the storm log from the Danish S. S. L. P. Holmblad:

Gale began on the 14th. Lowest barometer 27.86 inches at 2 p. m. on the 14th; position, latitude, 58° 30′ N., longitude 15° 10′ W. End of gale on the 15th. Highest force of wind 11; shifts of wind not given.

Too much reliance should not be placed on the reading of 27.86 inches, although at Greenwich mean noon on the 14th and 15th the barometer on board this vessel was recorded as 29.12 inches and 28.46 inches, respectively (all readings corrected), which did not differ greatly from those of a number of other ships in the vicinity.

By the 16th the storm area had contracted in extent, and the barometer was considerably higher than on the previous day, although westerly gales were still encountered between the 20th meridian and the coast of Scotland. On the same day there was a second Low in the Gulf of Mexico, central near Tampa, Florida. This disturbance was similar to that of the 12th and 13th, with strong northerly gales sweeping over the greater part of the Gulf, the Greenwich mean noon barometer readings ranging from 29.80 inches to 30.09 inches. Storm logs are as follows:

American S. S. Radiant:

Gale began on the 15th. Lowest barometer 30.08 inches at 10 a.m. on the 15th; position, latitude 23° 41′ N., longitude 90° 42′ W. End of gale midnight of the 16th. Highest force of wind 10; shifts of wind not given.

American S. S. El Capitan:

16th, 6 a. m., position, latitude 25° 17' N., longitude 84° 55' W. Overcast and partly cloudy, moderate variable breeze until 2 a. m. then fresh SW. and heavy rain. At 2.45 a. m. fresh northerly gale, frequent rain squalls and rough sea. 16th, 6 p. m., position, latitude 25° 49′ N., longitude 86° 12′ W. Partly

cloudy, moderate NW. gale, rough sea.

Charts XI, XII, and XIII show the conditions on the 17th, 18th, and 19th, respectively, when the greater part of the ocean was swept by severe gales. Storm logs are as follows:

Belgian S. S. Tongrier:

Gale began on the 17th. Lowest barometer, 29.62 inches at 7:41 a.m. on the 17th; position, latitude 37° N., longitude 64° 46′ W. End of gale on the 18th. Highest force, 11; shifts of wind not given.

American S. S. Elmsport:

Gale began 16th. Lowest barometer, 29.07 inches at 7:40 a.m. on the 17th; position, latitude 49° 04′ N., longitude 25° 29′ W. End of gale at 9 a.m. on the 17th. Highest force of wind, 11; shifts of wind SW.-S.-SSE.-NNW.

American S. S. West Carnifax:

Gale began on the 17th. Lowest barometer, 29.31 inches on the 19th; position, latitude 43° 30′ N., longitude 39° W. End of gale on the 19th. Highest force of wind, 10; shifts of wind WNW.-NNW.

Danish S. S. L. P. Holmblad:

Gale began on the 17th. Lowest barometer, 28.46 inches at 8 a. m. on the 17th; position, latitude 57° 25′ N., longitude 21° 40′ W. End of gale on the 17th. Highest force of wind, 11; shifts of wind not

British S. S. Rhode Island:

Gale began on the 17th. Lowest barometer, 29.06 inches at 8 a. m. on the 18th; position, latitude 44° 40′ N., longitude 58° 35′ W. End of gale on the 18th. Highest force of wind, 10; shifts of wind SSW.-WSW.-S. by N.

Danish S. S. L. P. Holmblad:

Gale began on the 19th. Lowest barometer, 28.52 inches at 2 p. m. on the 19th. Position, latitude 56° 33′ N., longitude 27° 11′ W. End of gale on the 20th. Highest force of wind, 9; shifts not given.

American S. S. Limon:

18th, 7 a. m.; position, latitude 19° 37′ N., longitude 83° 39′ W. Moderate gale, heavy sea, rain squalls.
19th, 7 a. m.; position, latitude 23° 16′ N., latitude 83° 50′ W. Moderate gale, heavy sea, squally.
20th, 7 a. m.; position, latitude 25° 14′ N., longitude 80° W. Moderate gale, heavy sea, heavy rain squalls.

This gale must have been of limited extent, as vessels in the vicinity of the *Limon* reported light to moderate

From the 21st to the 23d there was a moderate disturbance of limited extent in mid-ocean, as shown by the following storm log from the British S. S. Malvern Range:

Gale began on the 21st. Lowest barometer, 29.13 inches at 8 a. m. on the 21st; position, latitude 46° 50′ N., longitude 39° W. End of gale on the 23d. Highest force of wind, 9; shifts S. by W.-S.-NW.-N

On the 23d and 24th winds of gale force were reported from the region between the 20th meridian and the Irish coast, as well as on Nantucket shoals and in the vicinity of the Bermudas, while on the latter date vessels a short distance north of the Azores experienced moderate north-

erly gales.

The storm log from the American S. S. Coldbrook fol-

lows:

Gale began on the 22d. Lowest barometer, 29.74 inches at noon on the 22d; position, latitude 34° 45′ N., longitude 66° 21′ W. End of gale on the 24th. Highest force of wind, 9; shifts WSW.-SW.

On the 25th and 26th the conditions were comparatively featureless, as only a few reports were received from vessels in the steamer lanes denoting moderate gales.

On the 27th and 28th a severe disturbance of limited area swept the west coast of France, and on the 28th and 29th fresh northerly and northwesterly gales were also encountered in mid-ocean, between the 40th and 50th parallels. On the 28th there was a Low central near Hatteras, and gales from the northeast prevailed i the northern quadrants and from the southwest in the southern.

On the 29th the center of this Low was near latitude 36° N., longitude 58° W., and northeasterly gales were encountered by vessels between the 55th meridian and the American coast. The conditions in mid-ocean had changed but little since the previous day, as heavy weather still prevailed over the greater part of the steamer lanes on the 29th and 30th.

On the 30th, as shown on Chart XIV, unusually stormy weather for the latitude was experienced in the region be-

tween the Bermudas and the 45th meridian.

Storm logs covering the period from the 27th to the 30th are as follows:

British S. S. Nitonian:

Gale began on the 27th. Lowest barometer 29.16 inches at noon on the 29th; position, latitude 50° 26′ N., longitude 19° 06′ W. End of gale on the 30th. Highest force-of wind 9; shifts of wind SE.-E.-N.-NW.

American S. S. Carolinian:

Gale began on the 28th. Lowest barometer 29.77 inches at 4 p. m. on the 28th; position, latitude 35° 52′ N., longitude 74° 28′ W. End of gale on the 29th. Highest force of wind 10; shifts 1 point to

American S. S. Collingsworth:

Gale began on the 27th. Lowest barometer 29.38 inches at 4 a. m. on the 28; position, latitude 46° 20′ N., longitude 29° 40′ W. End of gale on the 29th. Highest force of wind 10; shifts W.-NW.

Italian S. S. Duca degli Abruzzi:

Gale began on the 29th. Lowest barometer 29.44 inches at 3.20 p. m. on the 29th; position, latitude 36° 30′ N., longitude 59° 30′ W. End of gale on the 29th. Highest force of wind 10; shifts not given.

NORTH PACIFIC OCEAN.

By F. G. TINGLEY.

The month of November opened with a typhoon approaching the Philippines from the direction of the Caroline Islands. During the period from the 1st to the 5th this storm moved in a WNW. direction across the Philippine Islands and the China Sea, reaching the Indo-China coast in the morning of the 6th. Particulars regarding this typhoon will be found in an article by Rev. José Coronas, S. J., Chief of the Meteorological Division of the

Philippine Weather Bureau, on page 658.

The first information of this typhoon is contained in a report from the Dutch S. S. Bali, Capt. R. H. Brouwer, Balik Papan (east coast of Borneo), October 26, for San Francisco. On October 29, according to third officer and observer A. L. J. van der Moer, the weather became dull and bad, sky overcast with Ci. St. and Cu. from the south and passing showers. There was a long, moderate N. swell. The Bali at Greenwich mean noon of the 29th was in latitude 2° 53′ N., longitude 126° 10′ E., barometer 29.84 inches, wind SSE., 3. Changeable weather was experienced on the 30th, heavy showers alternating with periods of clear sky. The northerly swell continued, the barometer fell slightly and the wind veered to NW.

On the 31st the center of the typhoon passed to the northward of the Bali, the course of the ship having previously been changed to SSE, to avoid the center. The lowest barometer recorded was 29.49 inches (reduced and corrected), which occurred at 2 p. m. (l. m. t.) of November 1, the Bali being at that time in latitude 7° 28′ N., longitude 138° E. The highest force of the wind was 8-9, WNW. to WSW. The passing of the typhoon was accompanied by a high, wild sea and swell.

On the 3d, according to press reports, this storm caused the wreck of the Philippine coastwise steamer San Basilic, en route to Puerto Bello, Leyte Island, with the

loss of 48 lives.

So far as known no vessels other than the ill-fated San Basilic were greatly involved in this typhoon. Several, however, were slightly under its influence at different times. The American S. S. West Cadron, Capt. F. E. Anderson, Honolulu for Manila (Nov. 5), was just coming under its influence on the 2d, having at 8 p. m. (I. m. t.) of that day a barometer of 29.52 inches, with a moderate NNW. gale and rough sea. The West Cadron's report ends here and it is not known how deeply involved in the approaching typhoon the vessel became.